



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

Applicant(s): Danek et al. Case: 761C4/CPI/L/B/PJS

Serial No.: 10/716,096 Filed: 11/18/2003

Title: CHAMBER FOR CONSTRUCTING A FILM ON A SEMICONDUCTOR WAFER

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Alexandria, VA 22313-1450

S I R:

Disclosure Statement under 37 CFR 1.56 and 1.98

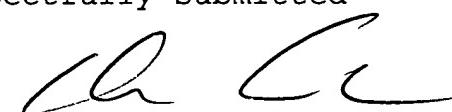
Pursuant to 37 CFR 1.56, the documents listed on the attached form PTO-1449 are disclosed. Pursuant to 37 CFR 1.98(d), these documents were previously cited by or submitted with a Disclosure Statement in a prior application that is relied upon by the above-identified Continuation application for an earlier filing date under 35 U.S.C. 120. As such, the documents may be found in the file wrapper of U.S. patent application serial number 08/808,246, filed on February 28, 1997, now U.S. Patent 6,699,530 issued March 2, 2004; U.S. Patent Application No. 08/680,913, filed on July 12, 1996; U.S. Patent Application No. 08/677,218, filed on July 9, 1996; U.S. Patent Application No. 08/677,185, filed on July 9, 1996, now U.S. Patent 6,155,198 issued December 5, 2000; U.S. Patent Application No. 08/567,461, filed on December 5, 1995; and U.S. Patent Application No. 08/498,990, filed on July 6, 1995. Inclusion of these documents on any patent issuing from this continuation application is respectfully requested. Under rule 37 C.F.R. 1.98(a), the applicant submits that no specific comments are necessary for any of the cited English language publications.

Respectfully submitted

Mar 30, 2004

Date

By:


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CERTIFICATE OF MAILING under 37 C.F.R. 1.8(a)

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Date

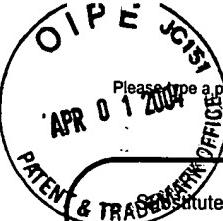
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PTO/SB/08a (08-03)

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Institute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Application Number

10/716,096

Filing Date

11/18/2003

First Named Inventor

Danek et al.

Group Art Unit

Examiner Name

Attorney Docket Number

761C4/CPI/L/B/PJS

Sheet

1

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5

Submission Date

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	A1	US-4,173,661	11-1979	Bourdon	
	A2	US-4,420,498	12-13-1983	Hirose et al.	
	A3	US-4,480,010	10-30-1984	Sasanuma et al.	
	A4	US-4,486,462	12-04-1984	Asahi, et al.	
	A5	US-4,619,748	10-28-1986	Moll, et al.	
	A6	US-4,629,635	12-1986	Brors	
	A7	US-4,683,149	7-28-1987	Suzuki, et al	
	A8	US-4,740,385	04-26-1988	Feuerstein et al.	
	A9	US-4,844,775	07-04-1989	Keeble	
	A10	US-4,871,421	10-03-1989	Ogle et al.	
	A11	US-4,874,494	10-17-1989	Ohmi et al.	
	A12	US-4,931,411	6-5-1990	Tigelaar et al.	
	A13	US-4,965,090	10-23-1990	Gartner, et al.	
	A14	US-4,985,372	1-15-1991	Narita	
	A15	US-5,000,113	03-19-1991	Wang et al.	
	A16	US-5,011,705	04-30-1991	Tanaka	
	A17	US-5,017,403	05-21-1991	Pang et al.	
	A18	US-5,053,245	10-01-1991	Kiyamu et al.	

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Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	B1	EP 0 174 743	03-19-1986	Morton Thiokol Inc.		
	B2	EP 0 376 709	07-04-1990	Inoue et al		
	B3	EP 0 446 988	9/18/1991	Eniricerche SpA		
	B4	EP 0 477 990	04/1/1998	Applied Materials		
	B5	EP-0 545 602	6-1993	SGS THOMSON MICROELECTRONICS		

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Sheet

2

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5

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10/716,096

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		Number-Kind Code ² (if known)			
A19		US-5,057,185	10-1991	Thomas III et al.	
A20		US-5,089,438	02-18-1992	Katz	
A21		US-5,175,126	12-29-1992	Ho et al.	
A22		US-5,246,881	09-21-1993	Sandhu et al.	
A23		US-5,250,328	10-1993	Otto	
A24		US-5,254,499	10-19-1993	Sandhu et al.	
A25		US-5,271,963	12-21-1993	Eichman et al.	
A26		US-5,273,783	12-28-1993	Wanner	
A27		US-5,283,085	02-01-1994	Gartner et al.	
A28		US-5,314,603	05-24-1994	Sugiyama et al.	
A29		US-5,356,722	10-1994	Nguyen et al.	
A30		US-5,378,660	02-12-1993	Ngan et al.	
A31		US-5,420,076	5-1995	Lee	
A32		US-5,468,687	11-1995	Carl et al.	
A33		US-5,480,684	01-02-1996	Sandhu	
A34		US-5,567,483	10-1996	Foster et al.	
A35		US-5,569,499	10-1996	Maeda et al.	
A36		US-5,576,071	11-1996	Sandhu	

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		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)			
B6		EP-0 678 903	10-1995	Tel Yamanishi KK	
B7		EP 0 711 846	5/15/1996	Applied Materials	
B8		EP-0 720 214	7-1996	Applied Materials	
B9		EP-0 738 002	10-1996	Texas Instruments	
B10		JP 59-197131	03-12-1985	Toshiba	

Examiner	Date Considered

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Application Number

10/716,096

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11/18/2003

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3

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		Number-Kind Code ² (if known)			
	A37	US-5,595,938	11-22-1994	Miyazaki	
	A38	US-5,610,106	03-15-1984	Sasanuma et al.	
	A39	US-5,656,337	8-1997	Park et al.	
	A40	US-5,698,062	12-1997	Sakamoto et al.	
	A41	US-5,712,193	01-1998	Hower et al.	
	A42	US-5,780,115	07-1998	Park et al.	
	A43	US-5,743,839	12-1998	Ng	
	A44	US-5,855,967	01-1999	Kirkpatrick	
	A45	US-5,880,018	03-1999	Boeck et al.	
	A46	US-5,972,179	10-1999	Chittipeddi et al.	
	A47	US-6,004,873	12-1999	Jang et al.	
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	A49	US-6,423,201	07-2002	Mandreckar	
	A50	US-6,500,501	12-2002	Akram	
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	A54				
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		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	B11	JP 63-229814	9/26/1988	NEC		
	B12	JP 02-310918	03-12-1991	Fujitsu		
	B13	JP 03-135018	09-04-1991	Hitachi		
	B14	JP 04-100,221	07-21-1992	Fujitsu		
	B15	JP 05-230,639	12-17-1993	Oki Electric Inc.		

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<p>Substitute for form 1449A/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p><i>(Use as many sheets as necessary)</i></p>			Application Number	10/716,096	
			Filing Date	11/18/2003	
			First Named Inventor	Danek et al.	
			Group Art Unit		
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Sheet	4	of	5	Submission Date	

U.S. PATENT DOCUMENTS

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	B16	JP 06-120152	04-1994	Nippon Denso Co.		
	B17	GB-2 299 345	10-1996	Hyundai Electronics		
	B18					
	B19					
	B20					

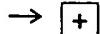
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5

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	C1	EIZENBERG, "Chemical Vapor Deposition of TiN for ULSI applications; Mat. Res. Symp Process, 427, 1996, Materials Research Society, p325-335	
	C2	PARK et al., "A Novel A1-Reflow Process Using Surface Modification by the ECR Plasma Treatment and its Application to the 256Mbit DRAM", International Electron Devices Meeting, US, New York, pp 109-112, Dec. 11, 1994	
	C3	RIE, et al., "Deposition of Titanium Nitride Layers by Means of Plasma-CVD," Harterei-Kolloquium 42,, October 5-10, 1986,Wiesbaden	
	C4	SMITH, D., "Thin-Film Deposition Principles and Practice," McGraw-Hill, Inc. Publishers, 1995, pp 423-432, 440-447 and 449-452	
	C5	WANG, et al., "Optimization of PVD Ti/CVD TiN Liner for 0.35 um Tungsten," Plug Technology, Mat. Res. Society Symp. Proc. 427, 1996, Materials Res. Soc. P383-387	

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